



# CONFIGURATION MANAGEMENT PLAN

# Depleted Uranium Hexafluoride Conversion Project CONFIGURATION MANAGEMENT PLAN Lead Preparer

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## DUF6 CONVERSION PROJECT CONFIGURATION MANAGEMENT PLAN Revision Summary

TITLE:	DOCUMENT NO:	<u>REV:</u>
Configuration Management Plan	DUF6-UDS-PLN-023	0F

## **REVISION DESCRIPTION**

Rev. 0, Issue for Project use

Rev. 0A, Issued for review

Revision 0A updates the CM Plan for the design, procurement, and construction of the Conversion Facilities and also incorporates a discussion of CM for the Cylinder Storage Yards. All attachments (except Attachment A) were unnecessary and were deleted since they are controlled by other documents (e.g., DCR form) or are not needed (e.g., example list of SSCs under configuration management). List of UDS procedures (Attachment A) was modified to remove procedures not directly relating to configuration management.

Revisions 0B-0D, incorporated comments from reviews. Made changes to correct findings and observations from QA independent assessment UDS-06-IA-005. Revised CMP to match current plan template in use. Added List of Lists to better describe what constitutes the body of controlled documents that list all of the equipment and components in the Conversion Project facilities and their relation to the Configured Items List.

Revision 0D (August 2007), Changed as result of IPT review comments.

Added definitions for Design Basis, Design Requirements, and Design Authority using definitions currently being used in other UDS documents. Revised definitions for Configuration Change Control Board, General Support, Production Support, Safety Class, and Safety Significant so definitions would agree with same definitions currently in use in other UDS documents. Revised introduction to reflect use of ANSI/EIA-649 and DOE-STD-1073-2003 as guidance in developing the CMP. Revised Section 2 to further address changes in preparation for operations. Also clarified the purpose and function of the Configured Items List (DUF6-G-G-LST-001) in Section 3.1.

Revision 0E incorporated comments from DOE review (letter DUF6-UDS-LEX-07-01111). Made changes to correct findings and observations from Management Assessment 07-O&M-008.

Revision 0F incorporated comments from internal review.

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## **ACRONYMS**

BCCB Baseline Change Control Board

BCP Baseline Change Proposal

CCCB Configuration Change Control Board

CDR Conceptual Design Report
CM Configuration Management

CMP Configuration Management Plan

DA Design Authority

DCR Design Change Request
DOE Department of Energy

DUF<sub>6</sub> Depleted Uranium Hexafluoride

EDP Engineering and Design Procedure

EPC Engineering Procurement Construction
FORC Facilities Operational Review Committee

GS General Support

ISMS Integrated Safety Management System

PQAP Project Quality Assurance Plan

PS Production Support
QA Quality Assurance

SC Safety Class

SRD System Requirements Document

SS Safety Significant

SSCs Structures, Systems, and Components
UDS Uranium Disposition Services, LLC

## LIST OF FIGURES

FIGURE NUMBER	TITLE OF FIGURE	PAGE NUMBER
FIGURE 3-1.	Structure, System and Component Configuration Management Identification	3

## **DEFINITIONS**

Configuration Change Control Board (CCCB): The CCCB consists of selected members of UDS management whose primary responsibility is to maintain Configuration Control of the Project. Its function is to review, evaluate, and formally approve or reject any proposed change to a Structure, System, or Component (SSC) that is identified as being within the UDS Configuration Management Program.

Configuration Management: The process that manages the configuration of the project's SSCs so that they satisfy the functional performance requirements defined in scoping documents and the safety requirements defined in the facility safety basis approved by the Department of Energy.

Configured Item: Any SSC that will be included in the UDS Configuration Management Program.

Design Authority (DA): The design authority is the individual designated to review and approve the process and facility designs to ensure the technical adequacy of the designs. The design authority also ensures the process design meets all requirements necessary to meet the conversion goals of the DUF6 Conversion Project.

Design Basis: The set of requirements that bound the design of structures, systems and components within the facility. These design requirements include consideration of safety, plant availability, efficiency, reliability, and maintainability. Some aspects of the design basis are nuclear safety requirements important to safety; others are not (DOE-STD-3009-94).

Design Change Request (DCR): A DCR is a formal document for requesting and authorizing changes to the DUF<sub>6</sub> Conversion Project Technical Design Basis.

Design Requirements: Those engineering requirements reflected in design output documents (drawings, specifications, etc.) that define the functions, capabilities, capacities, physical sizes and dimensions, limits and set points, etc. specified by design engineering for a system, structure or component.

General Support (GS): Designation for those SSCs not classified as Safety Class, Safety Significant, or Production Support.

List of Lists: A composite list comprised of Civil/Structural/Architectural, Mechanical, Electrical and Instrumentation and Controls discipline specialty lists. The configured items list is a subset of this list.

*Production Support (PS)*: Designation for those SSCs not classified as Safety Class or Safety Significant, but determined to be necessary to support expected operation of the facility.

Responsible Engineer. The DUF<sub>6</sub> project individual designated by the Lead Discipline or Process Engineer responsible for a specific SSC.

Safety Class (SC): Designation for those SSCs whose preventative or mitigative function is necessary to limit radioactive hazardous material exposure to the public, as determined by safety analysis. **Note**: Safety analysis has determined that the DUF6 conversion project does not have any safety class (SC) SSCs.

Safety Significant (SS): Designation for those SSCs which are not designated as Safety Class, but whose preventative or mitigative function is a major contribution to defense-in-depth and/or worker safety as determined by the safety analyses.

Safety Structure, Systems, and Components: Refers to both Safety Class Structures, Systems, and Components and Safety Significant Structures, Systems, and Components.

1 INTRODUCTION

# This depleted uranium hexafluoride (DUF6) Conversion Project Configuration Management Plan

(CMP) describes the configuration management processes applied to the design, procurement, and construction of the DUF6 conversion facilities as required by DOE Order 413.3A, Attachment 2, Item 9 and the configuration management processes applied to the operations and maintenance (O&M) of the cylinder storage yards. These processes provide the necessary controls to ensure that project configuration is in agreement with performance objectives identified in the technical baseline as well as applicable quality requirements. In addition, DOE-STD-1073-2003, Configuration Management was used as a guidance document in developing applicable structure and implementing actions of the CMP. This plan describes the process established that controls changes to the physical configuration of project facilities, structures, systems, and components in compliance with ANSI/EIA-649, National Consensus Standard for Configuration Management. The five functions of (1) planning and management, (2) identification, (3) change management, (4) status accounting, and (5) verification and audits (assessments) from this consensus standard were used to develop this plan.

## 2 PLANNING AND MANAGEMENT

It is Uranium Disposition Services, LLC (UDS) policy to establish and document the configuration management (CM) requirements prior to DUF6 Conversion Facility operation. Fulfilling the configuration management objective is accomplished through the five key CM elements: design requirements; work control; change control; document control, and assessments. This plan places applicable items under configuration management during the preliminary and final design phases of the DUF6 conversion facilities and maintains and tracks their configuration during the entire lifecycle of the item and the facilities. In this manner, UDS ensures that the project satisfies the functional and performance requirements defined in the system requirements documents (SRDs). For the Cylinder Storage Yards UDS ensures that safety basis document requirements are met. Through configuration management, UDS also identifies and maintains the physical configuration and the documentation related to configuration in continuous compliance with the documented physical and functional requirements contained in the safety bases documents approved by the Department of Energy (DOE). The special measures needed for configuration management are indicated in this plan and the implementing procedures that support and interface with it.

Management responsibility for compliance with this plan during the design, procurement, and construction phases of the DUF6 conversion facilities has been delegated to the UDS engineering manager. Prior to operation of the DUF6 conversion facilities, responsibility for configuration management will be transferred to the UDS operations and maintenance manager. Applicable revisions to existing procedures or generation of new procedures to continue implementation of the configuration controls through operations shall be approved during preparation for the contractor readiness review. The UDS operations and maintenance manager currently has overall responsibility for configuration management of the Cylinder Storage Yards.

Directly implementing this CMP are the DUF<sub>6</sub> Conversion Project procedures. The procedures affecting configuration management for the design, procurement, and construction phases of

the DUF6 conversion facilities and the operation of the Cylinder Storage Yards, together with a brief synopsis of each, are listed in Attachment A.

Of particular importance to implementation of the configuration management program for the DUF6 conversion facilities during construction are:

- UDS-EDP-012, Design Change Control
- UDS-CMP-031, Field Change Request
- UDS-PCP-012, Baseline Change Control

Steps or sections of these procedures are a part of the configuration management process.

Other procedures describe the process involved in procuring a component and are therefore important to the implementation of the configuration management program for the DUF6 conversion facilities. These procedures are also listed in Attachment A.

Procedures of particular importance to implementation of the configuration management program for the Cylinder Storage Yards are:

- UDS-U-DMP-0001, Document Control
- UDS-U-DMP-0002, Records Management
- UDS-U-NSP-0001, Safety Basis Documentation
- UDS-U-QAP-0012, Independent Assessments
- UDS-U-QAP-0013, Management Assessments
- UDS-U-NSP-0002, Unreviewed Safety Questions
- UDS-U-GFP-0108, Control of Work

The Personnel Training and Qualifications section of DUF6-UDS-PLN-003, DUF<sub>6</sub> Conversion Project Quality Assurance Plan (PQAP), requires that personnel receive training in the implementing procedures that are required for their assigned responsibilities. The individual's immediate manager or supervisor determines the type, extent, and depth of training appropriate for the assignment or job requirements. Individuals having assigned responsibilities specific to the administration and maintenance of the configuration management program receive training on this plan, the implementing procedures that support this plan, documentation that contains the design basis and design requirements (SRDs, SDD, FDD, DSA, TSR, etc.) and the configured item database. Training is conducted and documented in accordance with DUF6-UDS-PLN-027, Training Plan, and its applicable implementing procedures.

Effectiveness of this CM plan and implementing procedures are periodically assessed by UDS management using UDS-U-QAP-0013, *Management Assessments*, and independently by UDS QA using UDS-U-QAP-0012, *Independent Assessments*.

## 3 CONFIGURATION IDENTIFICATION

Note: From safety analysis it has been determined that there are no safety class (SC) SSCs on the DUF6 Conversion Project.

During the preliminary and final design phases of the DUF6 conversion facilities, the UDS normal design control processes are used to control each DUF6 Conversion Project structure, system, and component (SSC). Those SSCs subject to the additional controls of the configuration management program are selected based on their relative importance to safety, safeguards, and security; the magnitude of any hazard involved; operational reliability of the facilities; the particular characteristics of the items; and other relevant factors. SSCs are evaluated and classified as safety significant, production support or general support by engineering using UDS-EDP-011, *Grading of Structures, Systems and Components*.

SSCs identified as safety significant (SS) are automatically determined to be configured in the DUF6 Conversion Project configuration management program. Items determined to be production support (PS) are further analyzed using UDS-EDI-002, *Identification and Control of Configured Items*, to determine their applicability to the configuration management program. Those SSCs contributing to production support whose failure would adversely impact the availability, reliability and operability of the process are placed in the configuration management program as a configured item. For PS SSCs whose failure does not impact the process, those SSCs that are designated as general support (GS), these SSCs are not configured, and normal design control practices provide sufficient change control.

#### 3.1 CONFIGURATION MANAGEMENT PROCESS

The basic methodology for the identification of structures, systems, and components subject to configuration management is depicted in Figure 3-1. For the DUF6 conversion facilities, the lead engineers are responsible for the identification of configured items. The lead engineers evaluate each facility structure, system and component and identify the design requirements that apply to each according to the best design information available.

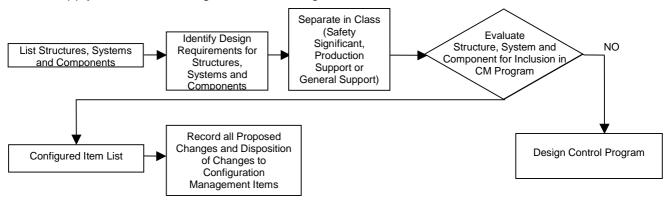


Figure 3-1. Structure, System and Component Configuration Management Identification

The Documented Safety Analyses (PDSA or DSA) identifies the SSCs that are safety significant and included in the configuration management program. The evaluation of system components are performed based on the functional and performance design requirements for the system or component.

Following evaluation, DUF6 Conversion Facility components are identified using UDS-EDP-010, Component Numbering System and listed in their respective discipline specialty lists which collectively make up the List of Lists (DUF6-G-G-LST-LST). As indicated in UDS-EDP-010, the component identification number contains several fields, which vary by discipline and component. The last field of the component number identifies the safety classification of the component, as well as whether or not it is a configured item. For configured items, this field ends with the letter "C." For example "SSC" denotes a safety significant component that is a configured item; "PSC" denotes a production support component that is a configured item. If the component is not a configured item then this field ends with the letter "N." For example "PSN" denotes a production support component that is not configured. Likewise, all of general support (GS) is not configured and the last field of the component number is "GSN." Safety Significant (SS) configured SSCs denoted as "SSC" and production support (PS) configured SSCs denoted as "PSC" make up the entries in DUF6-G-G-LST-001, Configured Item List, upon completion of the evaluations per UDS-EDP-011, Grading of Structures, Systems and Components, UDS-EDI-002, Identification and Control of Configured Items, and the SSCs subsequent numbering per UDS-EDP-010, Component Numbering System. The Configured Item List provides an important reference that identifies those SSCs that are controlled by this plan, and its implementing procedures. This numbering system provides the method for each component to be tagged and readily identified as either a configured item or non-configured. This will aid the operation and maintenance staff while performing their work in the DUF6 conversion facilities.

The engineering discipline component lists make up the List of Lists (DUF6-G-G-LST-LST). The Configured Items List is a subset of the total List of Lists.

Identification of configured items is integrated into each discipline's component list. The lead engineer of each engineering discipline controls these lists. The facility design manager maintains the List of Lists. Since the Configured Items List is a subset of the List of Lists, it is also maintained by the design authority. All configured items lists are included in individual lists which provide a reference to the P&ID and procurement specification which includes all requirements. As part of the transition from construction to operations, a complete Master Equipment List (MEL) is being developed and it will be verified against the current Configured Items List, P&IDs, and actual field installation during testing.

The engineering manager is responsible for oversight of both the identification of items under the configuration management program and the management of configured items. Design changes that affect the reason an item is a configured item are submitted to the Configuration Change Control Board (CCCB) for approval as discussed in UDS-EDP-012, *Design Change Control*. As a member of the CCCB, the Design Authority reviews and concurs with changes to a configured item.

For the DUF6 Conversion Project cylinder storage yards, the nuclear safety organization develops and maintains the list of configured items for each site. The cylinder storage yard Configured Items List includes SSCs that are safety significant due to their safety function. The Operations' Facility Engineering Manager is the Design Authority for the Cylinder Storage Yards.

## 3.2 IDENTIFICATION OF CHANGES TO CONFIGURED STRUCTURES, SYSTEMS AND COMPONENTS

As DUF6 Conversion Project safety analysis documents, such as the Hazards Analyses and the Preliminary and Final Documented Safety Analyses are developed and as additional design, procurement, and operations information becomes available, the SSCs within the configuration management program may change. The individual engineering discipline lead engineers working with the facility design manager maintain the List of Lists and the DUF6 conversion facilities Configured Items List. In addition, the design authority oversees the DUF6 conversion facilities Configured Items List. The operations and maintenance manager oversees DUF6-G-G-LST-002, Paducah and Portsmouth Cylinder Storage Yards Configured Items List. Safety analysis information is used to evaluate the relative importance of the following to determine desirability of placement on, or deletion from, the Configured Item List:

- Safety
- Safeguards
- Security
- The magnitude of any hazard involved
- The reliability of the item
- Function of the item within a system or structure
- The particular characteristics of the items
- Other relevant factors.

As the SRDs and the preliminary design develop into final designs, the safety functions of components are defined and their performance is evaluated to determine their contribution to DUF<sub>6</sub> Conversion Project goals. Proposed changes to the SSCs within the configuration management program are anticipated as a result of evolving design activities.

Proposed changes that affect SRD requirements for SSCs listed on the Configured Items List require evaluation, review and approval per UDS-EDP-012, *Design Change Control* prior to implementation.

# 3.3 SUPPLIER AND CONSTRUCTION CONTRACTOR CONFIGURATION MANAGEMENT

Procurement of SSCs, including those that are identified as within the configuration management program, follow the processes and procedures indicated in DUF6-UDS-PLN-012, *Procurement Plan.* Specifically, UDS-PRP-012, *Technical Evaluation of Proposals*, involves responsible engineers in the review of procurement packages to ensure the correct system and component requirements for configuration management are contained in procurement documents.

Upon receipt of a supplier or construction contractor field change request (FCR) (UDS-CMP-031, *Field Change Request*) (field changes, proposed nonconformance corrective actions, and waivers), the UDS responsible engineer determines if a configured item within the configuration management program is impacted.

#### 3.4 DOCUMENT IDENTIFICATION

Documentation associated with configured items and administration of the configuration management program is developed and maintained to ensure traceability of requirements and retrievability of information. DUF6-UDS-PLN-015, *Document Management Plan*, and its implementing procedures provide the controls for documents and records on the DUF<sub>6</sub> Conversion Project.

## 4 CHANGE MANAGEMENT

Configuration management and baseline change control are parallel processes that contribute to project control. Baseline change control is instituted to control changes to the established scope, cost, and schedule baselines of the project, which are defined in the System Requirements Documents (SRDs) and final designs. Configuration management is instituted to manage the configuration of the project's SSCs so that they satisfy the functional and performance requirements defined in technical baseline documents and the safety requirements identified in the safety bases documents.

Because the two processes of configuration management and baseline change control may affect one another, an evaluation must be made to determine if a change in one has an impact on the other. As an example, when a change is proposed to a configured item, it must be determined if the change will also impact the scope, cost, schedule, and/or baselines. Similarly, when a change to a controlled baseline is proposed, it must be determined if the change will also impact one or more configured items. While the determination must be made before implementation of a change, it may be made at any point in the process prior to implementation.

#### 4.1 CONFIGURATION MANAGEMENT CHANGE

Any DUF<sub>6</sub> Conversion Project participant, including members of supplier and construction contractor organizations, may request a change. Once identified, proposed changes are assigned to a UDS responsible engineer. The initial step of the process requires that the UDS responsible engineer determine if the proposed change impacts the reason an item is a configured SSC. SSCs that are not configured items are changed as a part of design evolution.

Changes are controlled by UDS-EDP-012, *Design Change Control*, or UDS-CMP-031, *Field Change Request*. The required documentation includes the proposed change, the justification offered by the originator, and the proposed basis for approving the change.

#### 4.2 UDS CONFIGURATION CHANGE CONTROL BOARD CHARTER

The CCCB has the responsibility to review, evaluate, and formally approve or reject proposed changes to SSCs that change the reason an item is identified as being a configured item within the DUF6 Conversion Project Configuration Management Program. Each requested design change is evaluated against technical criteria established in technical baseline documents, such as the SRD and the requirement sections of the facility design descriptions (FDDs) and the system design descriptions (SDDs), and safety criteria established in the Safety Bases documents approved by the DOE.

The CCCB is chaired by the UDS project manager and consists of the design authority, the facility design manager, the environment, safety and health/security manager, the engineering manager, the operations and maintenance manager, and the nuclear safety manager. Participating in the CCCB deliberations on an as-needed basis are the quality assurance (QA) manager, representatives of Cost Estimating, Project Controls, Construction Management, and others determined appropriate. Representatives of DOE, designated by the DUF6 Conversion Project federal project manager, are invited to participate, to the extent that they determine appropriate, in CCCB deliberations.

CCCB review of design changes that change the reason an item is identified as a configured item may be conducted by transmitting the DCR to the CCCB members for individual review and approval. If the project manager feels the DCR is complicated or warrants detailed discussion, then a formal meeting maybe called to discuss and review the DCR. Due to the various locations of CCCB members, the project manager may utilize a telephone conference call, supported by signature documentation transmitted by facsimile or email. Should the presence of support staff (e.g. Subject Matter Experts (SME)) be required, they may attend meetings at the invitation of a CCCB member. CCCB members shall assign and document signature authority to designated alternates when they expect to be unavailable for CCCB meetings.

As the CCCB reviews a proposed request for configuration change, it determines if the change will result in a configuration that would impact, or be governed by, the Integrated Safety Management System (ISMS). The ISMS process evaluates the proposed change to configuration to identify any safety issues associated with the change and to ensure that any Unreviewed Safety Question (USQ) is identified (and approved under a separate process) and safety solutions are incorporated into the configuration change and into the safety bases documents.

Every attempt will be made to achieve a unanimous decision by the CCCB. In the event of unresolved conflict, the project manager may direct a CCCB decision.

The CCCB also determines whether the technical configuration change would impact a scope, cost, or schedule baseline. If it is determined that one or more of the baselines is affected, then, following CCCB approval of the change, a baseline change proposal (BCP) is submitted to the DUF<sub>6</sub> Conversion Project UDS Baseline Change Control Board (BCCB). If the change does impact a baseline, the change may not be implemented until the baseline changes have been approved by the project BCCB. The BCCB has the authority to challenge a decision of the CCCB. The UDS BCCB activity is described in UDS-PCP-012, Baseline Change Control.

Changes approved by the CCCB that do not impact a scope, cost, or schedule baseline are implemented, and the associated documentation is updated to reflect the approved change.

Following approval or rejection of a proposed change, the originator of the change is notified of the CCCB decision through the lead engineer. As determined appropriate by the members of the CCCB, their staffs are notified of the determination. All CCCB actions will be documented on the respective DCR forms and meeting minutes if a CCCB meeting is held. DCR forms and meeting minutes shall be maintained as records in accordance with the requirements of DUF6-UDS-PLN-015, *Document Management Plan* and UDS-U-DMP-0002, *Records Management*.

For the cylinder storage yards, the Facilities Operational Review Committee (FORC) has the responsibility to review, evaluate, and formally approve or reject each proposed change to SSCs that change the reason an item is identified as being a configured item. Each requested design change is evaluated against technical criteria established in the Safety Bases documents approved by the DOE. Proposed changes to the lists of SSCs for the cylinder yards only within the configuration management program are subject to the approval of the FORC. The FORC ensures that changes to cylinder storage yards do not involve an Unreviewed Safety Question.

### 4.3 BASELINE CHANGE CONTROL PROCESS IMPACT

Configured Items may be impacted by approved baseline changes to cost, schedule, and scope initiated by UDS or the DOE. Approval of these changes is designated to occur at specified threshold levels determined by DOE and indicated in the DOE *Project Execution Plan* for the DUF6 conversion facilities. These changes are processed through the BCCB. When initiated and within the control threshold of UDS, this type of change is processed using UDS-PCP-012, *Baseline Change Control*.

When the BCCB has approved a baseline change that impacts one or more configured items, the change is submitted to the CCCB and is processed using UDS-EDP-012, *Design Change Control*. The CCCB has the authority to challenge a decision of the BCCB. The CCCB must approve changes referred to it by the BCCB before they are implemented.

#### 4.4 CHANGE IMPLEMENTATION

Following the CCCB approval of a design change and any required BCCB approval, the Configured Items List and the applicable documents on the List of Lists are updated. Affected project drawings and other documents are revised to indicate the change, and when indicated the physical condition of the item is modified.

Responsibility for incorporation of approved changes to configured items in the DUF6 Conversion Project configuration management program is the UDS Engineering Manager.

# 5 CONFIGURATION MANAGEMENT STATUS ACCOUNTING

Documents provided in the List of Lists are controlled as described in Section 3 Configuration Identification. Approved changes to items due to the DCR, CCCB and BCCB approvals result in design output document changes controlled by the respective engineering procedures. Through revision control of these documents the documentation traceability from change approvals to implementation are accounted for and documented in the respective lists. If these changes result in status changes in configuration tag number, equipment name, quality level, configured or non-configured status or performance category then appropriate changes are made to DUF6-G-G-LST-001, Configured Item List and DUF6-G-G-LST-002, Paducah and Portsmouth Cylinder Storage Yards Configured Items List.

The documents that make up the List of Lists and the Configured Items Lists are maintained throughout the life of the DUF6 Conversion Project facilities in accordance with the requirements of UDS-U-DMP-0001, *Document Control* and UDS-U-DMP-0002, *Records Management*.

## 6 CONFIGURATION VERIFICATION AND ASSESSMENT

The design control processes and procedures assure configuration control during design and construction. Further, configuration control is verified during turnover of completed system to operations which includes review of documentation and system walk-downs in accordance with the requirements of UDS-U-PEP-1008, *Turnover* and UDS-U-GFP-0014, *Control of System and Integrated System Testing*. Management assessments are periodically conducted by UDS management for the entire project in accordance with UDS-U-QAP-0013, *Management Assessments*. On a sampling basis UDS Quality Assurance periodically performs independent assessments of the configuration management program using UDS procedure UDS-QAP-0012, *Independent Assessments*. Both types of assessments shall include verification that approved changes made to identified configuration management program items and associated documentation have been accomplished in accordance with this plan and its implementing procedures. These assessments shall be planned and scheduled to support the ongoing DUF6 Conversion Project schedule.

Assessment results are documented and reported to, and reviewed by, responsible UDS management. As indicated in the assessment reports, appropriate, documented corrective action shall be taken to resolve any discrepancy or noncompliance found during these assessments. Corrective actions shall be tracked until verified as complete and closed as required by UDS-U-QAP-0005, *Condition Reporting*.

## ATTACHMENT A

# DUF<sub>6</sub> CONVERSION PROJECT PROCEDURES IMPLEMENTING THE CONFIGURATION MANAGEMENT PROGRAM

Title	Document No.	Description
Field Change Request	UDS-CMP-031	Establishes the requirements for initiating and processing of design changes initiated by the construction management staff.
Document Control	UDS-U-DMP-0001	Describes responsibilities and requirements for the receiving, processing, distributing, and maintaining controlled documents generated for or in support of the DUF6 Project.
Records Management	UDS-U-DMP-0002	Describes responsibilities and requirements for the creation, collection, storage, maintenance and disposition of records generated for or in support of the DUF6 Project.
Design Review Process	UDS-EDI-001	Establishes the requirements for the internal design review and formal design review processes used on selected engineering structures, systems and components.
Identification and Control of Configured Items	UDS-EDI-002	Established the requirements to place SSCs on the configured items list.
Preparation of Technical Specifications	UDS-EDI-008	Establishes the requirements for the preparation of technical specifications
Preparation of Calculations	UDS-EDI-009	Establishes the requirements for the preparation and revision of engineering calculations
Engineering Review and Approval of Design Documents	UDS-EDP-001	Establishes the requirements for the engineering review and approval of design documents.
Engineering HOLD	UDS-EDP-002	Establishes the requirements for initiating, reporting, and removing engineering HOLDs
System Requirements Document	UDS-EDP-003	Establishes the requirements for the preparation, review, approval, release, and change of the SRD.
Component Numbering System	UDS-EDP-010	Provides the methodology to be used in numbering components of the DUF <sub>6</sub> Conversion Project facilities, structures, and systems
Design Change Control	UDS-EDP-012	Prescribes the requirements for requesting and authorizing changes to the technical baselines
Safety Basis Documentation	UDS-U-NSP-0001	Establishes the processes and requirements associated with the development and approval of revisions to a facility's approved safety basis

Title	Document No.	Description
1100	2004	documentation.
Baseline Change Control	UDS-PCP-012	Describes the process for preparation, review, and approval of DUF <sub>6</sub> Conversion Project Baseline Change Proposals (BCPs) prepared by UDS personnel
Technical Evaluation of Proposals	UDS-PRP-012	Establishes a uniform method for obtaining engineering and construction review and evaluation of technical proposals on the DUF <sub>6</sub> Conversion Project
Purchase Approval Request (PAR)	UDS-PRP-014	Establishes the processing and submission of Purchase Approval Request (PAR) to DOE for procurement action prior to contract award
Processing Contractor Releases and Notification for Hold Points	UDS-PRP-016	Describes methods for processing contractor shipment releases and notifications of "Hold Points"
Contractor Waiver and Deviation Request (CWR/ CDR)	UDS-PRP-017	Provides the method for processing contractor initiated waiver or deviation request on the DUF <sub>6</sub> Conversion Project
Contract Change Orders and Modifications	UDS-PRP-018	Establishes the method for processing change orders and modifications to the DUF <sub>6</sub> Conversion Project contracts
Material Receipt Control	UDS-PRP-022	Establishes the requirements for the receipt, control, and disposition of procured materials, equipment, supplies, and other items on the DUF <sub>6</sub> Conversion Project
Graded Approach	UDS-QAP-004	Defines the graded approach, which involves the selection and application of appropriate technical and administrative controls commensurate with the associated risk
Independent Assessments	UDS-U-QAP-0012	Provides direction for the implementation of independent assessments on the DUF <sub>6</sub> Conversion Project
Management Assessments	UDS-U-QAP-0013	Identifies deficiencies or proficiencies and facilitates continuous quality improvement in management processes, systems, and controls
Unreviewed Safety Questions	UDS-U-NSP-0002	Establishes the process for determining whether proposed changes are adequately evaluated relative to the approved safety bases
Procedure System	UDS-U-QAP-0003	Establishes the requirements for the preparation, review, approval, issuance, cancellation, and revision of the DUF6 Conversion Project implementing procedures and forms.

**Title** Document No. **Description** Describes the method for identification. Condition Reporting UDS-U-QAP-0005 documentation, tracking, closure, and verification of adverse and nonconforming conditions on the DUF<sub>6</sub> Conversion Project Lessons Learned UDS-U-QAP-0017 Describes the Lessons Learned Program and associated processes for implementing the applicable requirements of the DUF<sub>6</sub> Conversion PQAP Trending UDS-U-QAP-0019 Describes the processes for the collection, analysis, and evaluation of data and information for determining and reporting the existence of trends to facilitate continuous quality improvement activities. UDS-U-TRN-0001 Describes the methods of implementing Training and Qualification training and, as appropriate, qualification of UDS personnel on the DUF<sub>6</sub> Conversion Project Turnover UDS-U-PEP-1008 Establishes the responsibilities, requirements, and processes that ensure a safe and orderly transition of iurisdictional control of SSCs between the Construction, Testing, and Operations organizations UDS-U-GFP-0014 Control of System and Establishes the process for preparing, Integrated System Testing implementing, and documenting system and integrated process testing of DUF6 conversion facilities structures, systems and components Control of Work UDS-U-GFP-0108 Defines process requirements for planning and executing work in UDS facilities UDS-U-PEP-1009 Describes the responsibilities and System Engineering requirements of managing systems, structures, and components (SSCs) to ensure that they maintain their design function after the construction phase is completed

## **END OF DOCUMENT**